SYNOPSIS

ACCEPTANCE OF KHADI AS INFANT WEAR IN INDIAN MARKET

Submitted for the award of the degree of

Doctor of Philosophy

IN THE FACULTY OF ARTS & SOCIAL SCIENCES

THE IIS UNIVERSITY, JAIPUR

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December 2011

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Introduction

Swaraj without swadeshi is a lifeless corpse and if Swadeshi is the soul of Swaraj, Khadi is the essence of swadeshi. Therefore Khadi became not only a symbol of revolution and resistance but part of an Indian identity.

(M. K. Gandhi)

The word 'Khadi' is derived from a dialect of Hindi – 'Khadi' which means the traditional hand-loom, a machine used by hand to weave cloth for the people living in the villages. A village is not just a cluster of a few hundred persons living in one place; it signifies a socio-economic and cultural unit based on the concept of cooperation and not competition. Therefore, Khadi is the outcome of the complementary economics and not competitive economics. The socio-cultural concept of Khadi signifies equality and cultural harmony.

In the modern world a man or woman is usually judged at first sight from his or her dress; and we have the habit of forming an opinion about his or her socio-economic and cultural status from the type of dress he or she wears. Khadi, the cloth woven on the handloom, has uniform shape and color and leaves no specific mark on the man or woman who puts it on. It is therefore not possible to judge him or her and form an opinion about his or her status. One can say that Khadi is the concept of 'simple living and high thinking' in actual practice and a symbol of socio-economic equality.

The question is **what is the place of Khadi in a highly advanced society in which the cost of production is less in the centralized production system using high technology?** I think this is a fundamental issue and it raises a point where we have to decide our basic approach towards life and its style. There is no doubt that the centralized production system through high technology is cheaper than the decentralized one based on labor intensive simple machines, such as the spinning wheel and the handloom. But here we fail to recognize a very hard fact: the plight of a worker employed in sub-human conditions in big industries on low wages, a victim of capitalism which causes disparities in society which is the root-cause of violence. **So we have to decide as to what sort of life we want to live and the lifestyle we would like to adopt.** Do we need self-sufficiency

in meeting the basic needs of people or just build a society based on human exploitation? This is what the whole question boils down to.

Another question is about the **quality and variety of cloth produced.** I am all for variety, design, colors and prints but the best way of getting things made to your choice is to do it with your own hands. One does draw the maximum joy and satisfaction only through one's own creative work; how can a machine think of the designs that one likes? From that angle, producing Khadi cloth for meeting one's own basic needs is much cheaper, however, the times are changing Khadi is no more only for basic clothing, With more and more interest the people are showing in Khadi, the design interventions are increasing which is making Khadi competitive not only in terms of acceptability as a natural fiber but also competitive with respect to design.

There are still many hands that need work and Khadi could provide an alternative part-time, if not full-time occupation.

Therefore, one can say with complete self-confidence that those who wish to change their way of life, their lifestyle and adopt a new way of life, for them the adoption of Khadi is a good way, as today Khadi along with being comfortable is moving towards design development.

Clothing, which is one of the basic necessities of man, plays a significant role in an individual's life at all stages. It provides a way, a mean to expression and esthetic enjoyment, a way to conform, a way to suggest wealth and prestige, an outlet for creative energy. It helps in personality development and attitude formation.

Clothing was not given as much importance in earlier days as it is being given today. In earlier days man used to cover his body with leaves and animal skins. With the development of civilization, man learnt the art of agriculture and started cultivating fiber plants and with the passage of time learnt the art of spinning and weaving.

Global warming is the serious issue that the world is now facing. The tendency for eco-friendly products has been extended to textile and apparel products, particularly those products, which directly come into contact with the skin for a prolonged period of time. Clothing has the ability to protect the skin, and a new born child who has the most sensitive skin needs most protection ,thus

there is an urgent need to design special clothing for infants of present generation.

Infancy is the beginning or the early period of existence as an individual and it is a very important period of the lifespan. Today, infant's clothing is expected to meet all requirements related to comfort, healthcare, handle and easy care properties as well as performance. Infant's skin is very soft and tender, therefore, chemically safe dyes, soft materials are used for making infant's clothing. The infant-clothes are essential to keep them looking cute and enable them to remain cool or warm and comfortable. Growth rate of an infant is faster than the other age groups and their bodies are more susceptible to infections and irritations. The type of fabric selected for infants bears a direct relation to the health of an infant. Priority should be given to infant's comfort along with the style and the look. The infant-clothes should be made of 100% natural fibers. A fabric that is too thick and heavy makes the infant look tired. Textures of the fabric should not be itchy, as the skin of an infant is very tender. Due to less cost, easy availability, easy care and maintenance parents have been opting for synthetic fabrics or their blends for children's clothing, but the question is :At what cost? **Do we want our comfort and convenience at the cost of the child?** A glance at the properties of Terylene, Cotton and their blend, Terry-cot gives a clear image.

Terylene

Terylene is a manmade polymer material. It is made from coal, air, water and petroleum products. It is a strong fiber that keeps its shape and therefore resists wrinkling. The fiber does not withstand medium to high temperatures and melts and burns at the same time, therefore it should be ironed at cool temperature, if at all. Terylene threads last for a long time and wear well, so they are used for many garments and sewing projects. It does not shrink like its natural counterpart and holds dye extremely well, a good thing for textile artists, but bad for stain – removal from terylene items. Terylene was extremely popular in the 1950s but since then it is used more as a blend than the main fiber being used for garments or fabric.

Cotton

Cotton is an all-natural fiber made from the pod of a cotton plant. It is the principal fiber used in making the world's clothing. It is known for being light, cool, comfortable and absorbent. Many

people describe cotton as a fabric that “breathes.” It is also easy to dye and to clean, though dyes do not hold as fast to natural fibers as to the synthetic fibers of Terylene. Cotton can withstand high temperatures, but does wrinkle easily and shrinks with washing.

Terry-cot

Terry-cot refers to a versatile blend of Terylene and Cotton, very successful blend of two parts of Terylene and one part of Cotton. Terry-cot fabric is having wide acceptance in society because of its easy care, crease resistance, fairly good resistance to adoption of stains, drip-dry properties etc. They possess some comfort, absorbency and majestic look because of cotton. Terry-cot blends are stronger than cotton hence garments made out of these last longer. We can have increased choice of providing mixed shades and effects on these fabrics.

Advantages of Cotton over Terry-cot

Terry-cots are having the problems of uncomfortable feel because of lower absorbency than Cotton. Garments made out of Terry-cots fade unevenly at some specific places like knees and elbows etc., due to variable dyeing properties of Terylene and Cotton as compared to those made out of Cotton. Terylene in Terry-cots is not eco-friendly due to its manufacturing processes, it is more prone to skin diseases and difficult to dispose off as compared to Cotton.

Advantages of Khadi (Cotton) over Mill made Cotton

Mill made Cotton cloth lacks the natural texture in comparison to handmade Khadi. Stronger machine beating in mill made Cotton cloth makes it harsh while handmade Khadi cloth is soft. Inherent variations available in Khadi make it more attractive than mill made cloth. Moreover the processes involved in making of the mill cloth are not eco-friendly as they are in Khadi cloth.

Consumers today are looking for safe and beautiful clothing for infants. They will not mind to pay extra for health, safety and design. The largest manufacturer of children garments, designers are working in this direction, and Khadi being a hand woven and hand spun natural fiber is friendlier for our environment, health and future of this planet.

Review of Literature

The review of literature for the present study has been conducted under the following heads:

- Khadi the need of the Hour
- Designing Infant Wear

Khadi was conceived in 1920's as a symbol of Swadeshi movement and self-reliance of the villages. The Gandhian ideas of simplicity, Swadeshi spirit and Decentralization are embodied in Khadi. It was a practical attempt to relieve the poverty and uplift the standards of Indian village people. In 1919, when there was a movement to boycott foreign goods, Gandhi ji appealed to his countrymen to adopt Khadi. At the same time during Nagpur session (1920) the Indian National Congress decided to encourage introduction of Khadi in their everyday lifestyle.

It is a well-known fact that Mahatma Gandhi used to refer to Khadi as "the livery of freedom." In fact, Khadi was introduced in 1920 as a political weapon for the boycott of foreign goods in general and clothes in particular and thus it stimulates in every Indian a desire for independence as well as attitude of self-discipline. Khadi was a vital part of non-cooperation movement. However, Gandhi ji was always alive to the economic aspects of Khadi. He, therefore, emphasized the economic value of Khadi, as a means of finding work for spinners and weavers, as a measure of relief from the evil of widespread unemployment. Slowly a separate Board called the All India Khadi Board was established in December, 1923, and this has continued to be an integral part of the Congress organization and it has worked under its direction and supervision.

The All India Spinner's Association, also known as Akhil Bhartiya Charkha Sangh, was formed in 1925. Though this body was closely associated with the Indian National Congress, it was completely autonomous in its working. Till 1935 the Association concentrated its activities on propagation, production and sale of Khadi. The main objective of this association was that Khadi could have "a permanent effect only when carried out as a part and parcel of the wider program of non-violent village upliftment or village reconstruction."

After the advent of independence the support of the National Government was sought for the promotion of Khadi and it was readily forthcoming. The all India Khadi and Village Industries

Board was formed which was succeeded later by the Khadi and Village Industry Commission. The work received a big boost and production of Khadi which was valued at one and a half crore rupees at the time of the establishment of the Board in 1953 increased to Rs. 22.23 crores and spread widely throughout the country. Spinning centers were established in one lakh villages and weaving centers in one thousand villages. The small institution gained a new vigor. Organized efforts were made to impart training, conduct research, introduce improved implementation techniques etc. The government also extended its aid in the form of handsome rebate.

The Khadi and Village Industries Commission (KVIC) is a statutory body created by an Act of Parliament (No. 61 of 1956 and as amended by Act No. 12 of 1987). It is in-charge of planning, promotion, organization and implementation of program for the development of Khadi and other village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary. Established in April 1957, it took over the former All India Khadi and Village Industries Board.

Khadi is a fabric that has reinvented itself in a new avatar and has become the darling of the haute couture masses. It's trendy to be ethnic now and Khadi is the ideal fabric for it, even in western wear this fabric manages to create a look that is contemporary yet thoroughly Indian. There is an exciting array of eastern and western wear attire available now.

Devika, a well-known designer launched the Swadeshi label in 1985 which was distributed through nearly 50000 Khadi Gram Udyog Bhandars and emporia. This was the first step towards changing Khadi's earlier image of being unfashionable.

In 1990 designer Ritu Kumar of Delhi presented her first Khadi collection, "Tree of Life", which helped put Khadi in fashion circuit.

Sekri, (1992)[3] conducted a "Study of cotton and woolen Khadi in Punjab" and did a survey. The study was carried out to gather the information regarding range of operations involved in the production of Khadi cotton and wool and also to study the acceptance of Khadi among three selected income groups residing in Chandigarh. The result achieved was that people accept Khadi for one reason or the other, however, the study highlighted that design intervention in Khadi will

be welcome by all.

Kumar, (1993) linked Khadi with the history of India and its freedom. He said Khadi provides employment for a large section and it imparts a very elegant and a sober look. Indian fashion designers use Khadi for the international market.

Biswas, (2005) said Khadi has reinvented itself in new avatar and has become the darling of haute couture masses.

Doshi, (2006) commented that Khadi is considered as one of the most beautiful Indian fabrics and it symbolizes luxury and uniqueness. Wearing Khadi is no more for the poor only, with the ever increasing price many high profile personalities and economically strong people prefer to wear it.

Garg, (2006) "Nightwear designing in Khadi apparel" The study was carried out to make Khadi nightwear to provide more comfort using a breathable fabric. It was found that designing of nightwear with Tie and Dye technique in combination with hand and machine embroidery is a successful technique and can provide a new look to the Khadi apparels. The designs so developed showed great acceptability by the sample group.

Serva, (2006)[43] worked on "Development of designer Khadi shirt" The study was conducted to design Khadi Shirts, and assess the acceptability of constructed Khadi shirts. Results were positive and almost all types of tentative design in fabric and shirt designs were readily acceptable.

Bhandar, (2006-07)[6] directed her efforts in, "Exploring colorful world of Khadi bed sheets." thus this study aims at development of designer bed sheets. It was found that the ileum contributed maximum to the household textile of Khadi bed sheets. The data was collected through books and by administering interview schedules on 50 respondents. The data thus collected was analyzed and 18 designs were proposed and were screened for the consumers which were then developed into prototypes.

Lata, (2007) "Creating designer skirts in Khadi Fabric" the study was taken up to check the consumer's attitude and preference for Khadi shirts. Stiffness and durability of cotton Khadi fabric was found to design the skirts. Moreover the acceptability of developed designs was also assessed.

It was found that designing techniques used in this work helped in improving the aesthetic appeal of a Khadi skirt and a combination of structural and applied design techniques successfully imparted a novel look to the newly designed skirts.

Kaur, (2007)[20] carried out a survey on "Rejuvenating Khadi Marketing" (Delhi/Ganga nagar/ Jaipur). As a part of the survey, Acceptability of Khadi for different age groups was found out. It was observed that Khadi is mostly purchased for old age & adult age group. Khadi fabrics & garments are not purchased for school going children because of non availability of sizes & styles. Acceptability for designs & prints was also studied. Results showed that the majority of respondents accepted woven designs combination of different techniques, block printing & overall prints, some like Batik, tie & dye etc. and selection as per fashion trends. To find out the buying acceptance of consumers & problems faced by consumers towards Khadi an effort to make the dealers aware of changing tastes of consumers and fulfill the demand of consumers & increasing interest of consumers and implementation of new techniques that can be used to improve the stability & acceptance of Khadi were studied.

Garg, (2007) worked on "Designing of Khadi suits by combining embroidery with other embellishment techniques." The main objective was to provide novelty and variety in designs and promote Khadi by giving extra gracious and luxurious look to the salwaar suit using sequins, mirror, patch work, printing etc. and evaluate acceptability of designed Khadi suits. It was concluded that designs were appreciated, suitability of embroidery with embellishment were rated good to excellent .Maximum respondents were ready to add these suits to their wardrobe and willing to pay the price. It can fulfill the fashion need of consumer.

Mittal, (2007)[27] did "value addition on Khadi Jackets", Mittal studied Fashion Designer's work and their views on Khadi. It is a fabric that has reinvented itself in a new avatar and has become the darling of the haute couture masses. Gone are the days when Khadi was associated with dowdy politicians in a Gandhi cap. Wearing this home-grown material today has become chic, cool and the height of elegant fashion. It's trendy to be ethnic now and Khadi is the ideal fabric for it, even in western wear this fabric manages to create a look that is contemporary yet thoroughly Indian.

There is an exciting array of eastern and western attire now.

Kumari, (2007)[22] worked on "Adaptation of Mughal carpet motifs for Designing Khadi Suit." Motifs were picked up and suits were developed, analysis of consumer acceptance for designer suits indicated that all the respondents were ready to include the suits in their wardrobe and were willing to pay the estimated cost of the suits. It was concluded that by making slight modifications in our traditional crafts, we can introduce some designs for extra fashion conscious people.

Suneet, (2007)[41] "To create cloudy effect on Khadi fabric using tri-functional reactive dyes" The study was conducted to create a novel effect on Khadi fabric using tri-functional reactive dyes, they also tried to compare tri functional dyes with tie & dye and test it for its colorfastness towards sunlight, washing , rubbing, ironing and dry-cleaning. It was found that the cloudy effect and tie & dye effect had well to excellent fastness properties towards washing, dry cleaning, ironing, rubbing and sunlight. All the properties of both the samples were the same / very good / excellent except in case of wash fastness result which was found to be only good. Tie & dye samples were highly accepted according to appearance whereas the cloudy effect samples were highly accepted according to design effect by respondents.

Sungandhi, (2007) studied the, "Effect of anti-crease finishes on comfort properties of Khadi Fabric". The present study was aimed to study the effect of anti-crease finishes; keeping this in view various experiments were done. The Grey Khadi was listed for fabric count, thread count, fabric porosity, and fabric cover. The fabric was scoured; bleached, Constructional properties were checked. Influence of resin treatment on comfort properties like air permeability and water were checked .The findings were – decreasing trend found in air permeability resin treated Khadi exhibited decrease values of air permeability. It may be due to appreciation of resins. A very slight difference in thermal insulation value was observed when treated with resins. Water absorbency slightly decreased when fabric was treated with resin. The resin treated sample exhibited small reduction in the value of water vapor permeability.

Niharika, (2007)[32] studied the, "Effect of mercerization on comfort properties of Khadi Fabric" The grey Khadi (plain weave) was parched and the effect of mercerization on comfort properties

was seen. A series of experiments were conducted, fabric was scoured, bleached and was mercerized with two different alkalis (NaoH&KoH) by using slack mercerization. Before conducting the tests, fabric weight, fabric cover, fabric porosity, fabric count and fabric thickness were determined. Influence of the treatment on comfort value of Khadi was checked. The findings were that alkali treated Khadi exhibited decreased value of air permeability. It may be due to alkalis. There was a downward trend found in water absorbency as concentration of alkalis increased water absorbency. KOH mercerized samples showed a small reduction in comfort index value with respect to control sample, but KOH mercerized samples showed a higher comfort index value as compared to NaoH mercerized samples. Correlation between constructional properties and comfort parameters were also checked. Air permeability and water permeability increased simultaneously while fabric porosity also increased.

Singh, (2007)[44] carried out a study on "Renaissance of Khadi bags". The main purpose of the study was to create new bags thus to assess the present product range of Khadi in the market and develop new designs for Khadi bags keeping in mind the needs of potential consumer. Prepared prototype and assessed acceptability of designs to find out marketability and profitability of bags. Students and teachers preferred designed appearance of Khadi bags. They also preferred structural designs / embroidery in bright colors. However rating of block printed bags was higher than other combination of techniques.

Singh, (2007) worked on "Designing of Khadi garments with macramé technique." The study aimed at surveying use of macramé technique in garment production, to develop skirts and tops with macramé technique and to check the acceptability, marketability of skirt and tops. The results were that there was absence of macramé on clothing and it was found only on household articles and accessories. The designs along with the calculated price of tops and skirt were accepted by the consumer design with full macramé, in case of processing almost 80% respondents said that they were willing to pay higher price than the calculated price.

Bajpai, (2007)[5] studied the, "Effect of different resizing methods on comfort and physical properties of Khadi." The most important property of any apparel is comfort. It is one of the most

important aspects of clothing. Clothing comfort is dependent on many factors; wet processing of fabric is one of them. Most of the woven fabric are scoured and desized for their further processing keeping in view the unparalleled role of resizing in wet designing of the cotton fabric; all the resizing methods were used to find an efficient method. Weight loss and amount of size coat removed were assessed as the basis of efficiency of resizing method. After resizing some of the physical properties viz – crease recovery, bending length, tearing strength and fabric porosity were analyzed. Besides this, comfort parameter like air permeability were assessed, their dependence on fabric porosity was also evaluated .Comfort index was also calculated. The physical properties decreased crease recovery and bending length shows the softness of fabric, it means size coat has been removed from the fabric, whereas tensile strength was increased. In the same manner wicking height, fabric porosity, air permeability also affected the fabric favorably.

Tandon, (2007) did "Designing of Khadi trousers and capris using different embellishment techniques." The main purpose of the study was to give opportunities to designers to explore new and trendy designs in khadi trousers and capris. It would provide the means for upliftment of the rural areas providing them financial assistance through employment in khadi cottage industry. It will give recognition to khadi in national and international market. First of all Khadi fabric was selected for designing of trousers and capris for adolescent girls. New designs for trouser and capris were created by different embellishment techniques. Each design was different from the other and new features were added in each design. The staff and the students of Banasthali Vidyapith were selected for the evaluation of these designs. Seven unique designs were selected for both trousers and capris. After construction the acceptability of trousers and capris was assessed again. It was found that majority of respondents rated capris as excellent and trousers as good . It was however concluded from the study that the designs can be successfully incorporated in the garments to give a new look to the Khadi fabric.

Singh, (2007) "Creating fantasies on Khadi belts."The investigation was planned to design Khadi belts. Different shapes, surface enrichment techniques and embellishment materials of earlier times were combined with an ethnic as well as trendy look. Consumer preference for designer

belts was found to be excellent to very good. More than 90% respondents accepted the actual price and preferred to purchase it.

Ahsaan, (2009) said, the designers sing hosannas to the versatility of the fabric, wearers swear by its practicality and comfort. It is not only the perfect answer to India's hot and humid summers but it also provides adequate protection against winter chill.

Dogra, (2009) quoted that there are two kinds of buyers of Khadi. The first kind of people buy Khadi for a reason. A look at the past reveals the way Khadi was promoted by Gandhiji. Khadi was promoted extensively to make them economically more self-sufficient. The second reason why some people wear Khadi is the feeling that by designing clothes in Khadi and by wearing Khadi they are supporting the 80 percent of the population that lives in villages.

Vasundhara Raje, (2010) Minister for Small Scale Industries initiated a movement to revive all the 7,000 KVIC shops in India and make Khadi more fashionable and affordable. The KVIC hired the services of leading fashion designers to help create a new range and brand of Khadi wear. With many designers experimenting with Khadi, the designs are no longer as simple as they used to be. Dress designer **Rohit Bal** on his initiative towards Khadi has said, "Khadi is the Indian alternative for Linen. It is as comfortable, and now, we've proved that it is as fashionable".

Designing Infant wear

Sehgal, (1976) studied the "Preference of educated and uneducated mothers for their children's garments" Interview cum Questionnaire was prepared. Sample of mothers having 5 to 10 year old children was taken. Women educated up to 8th class were taken, in uneducated group and women with graduate or post graduate degree were taken in educated group. It was found that more number of respondents in both the groups, preferred cotton fabric because they are cheap and at the same time comfortable. Synthetics were liked because it is easy to care for them.

Kaur, (1984) worked on "Designing and Construction of sun suits for 3 years old children and their suitability of the selected design to checks, polkas and plain cotton fabric" The study was carried out to design sun suits and select most preferred out of them and to find out the suitability of plain material, polka dots and check for the designs. The study was adjudged by twenty graduate

house wives that are mothers of 3 year old children. It was found that Medium size check and polka in red color and plain fabric of light blue color were used. Four plain, four check and two polka dot designs were selected at first ten positions after construction. Order of preference changed in sketched and constructed designs.

Grewal, (1985) studied "Mother's selection of child wear apparel" Factors affecting the selection of children's readymade clothes and mother's satisfaction with their clothes were studied and the data was collected by the Questionnaire method from hundred mothers having 4-5 years old children .Results found were that fabric used, size and fit of garment and color and design were two decisive factors in the selection of readymade garments. Mothers preferred to buy garments made of Terylene and cotton blends which they reasoned were easy to care for.

Kaur, (1986) "surveyed the presence of the readymade garments for 3-6 years old children as available in Chandigarh" The respondents were interviewed by a survey method to find out different types of readymade garments available, their materials, colors, prints etc. It was found that cambric and rubia were more popular for kurtas, while poplin and polysonic for pyjamas. Plain fabric and white color were most popular for night suits. Sky blue, beige and cream colors were also liked. Machine embroidery was more popular than hand embroidery and floral motifs were more used. For finishing bottom hemlines of kurtas and pajamas machining was used, while for necklines bias band was used. Interlocking was preferred to machining for finishing raw edges. Fasteners and Buttons were being fixed with running stitch. Fancy buttons were more preferred than press buttons for kurtas.

Nikhanj, (2003) worked on "Designing and construction of night suits for 5-6 year old boys" Night suits was designed by using combination of printed fabrics with plain matching fabric. Judges for evaluation included 30 respondents i.e. mothers of 5-6 years old boys and experts from the faculty of department of clothing and textiles, Government Home science college, Chandigarh. It was found that 76.67% respondents preferred readymade night suits, 16.67% homemade and 6.67% tailored made. Feature desired by mothers in night suits of their sons were elasticized waistband, front pocket, front placket, pocket, collar ,yoke and piping in that order.

Mukherjee, (2009) realized the need for an effort to work towards kids clothing. He said that there is a dearth of good clothes for children in the market. The clothes available are too Bollywoodish or too western. Inherent innocence of kids is getting lost in clothes they wear.

Kaur, (2009) worked on "Designing and construction of Layette for Infants (Birth to 6 Months). For the study Plain, dotted, striped, checks and nursery prints in blue as well as in pink color were selected, along with the standard size for construction. Designs were developed both for boys and girls.65%of the respondents preferred homemade, followed by readymade [25%] and tailor-made [10%] respectively. Marketability of layette showed exceptionally good results and the consumer acceptability for layette was also very encouraging.

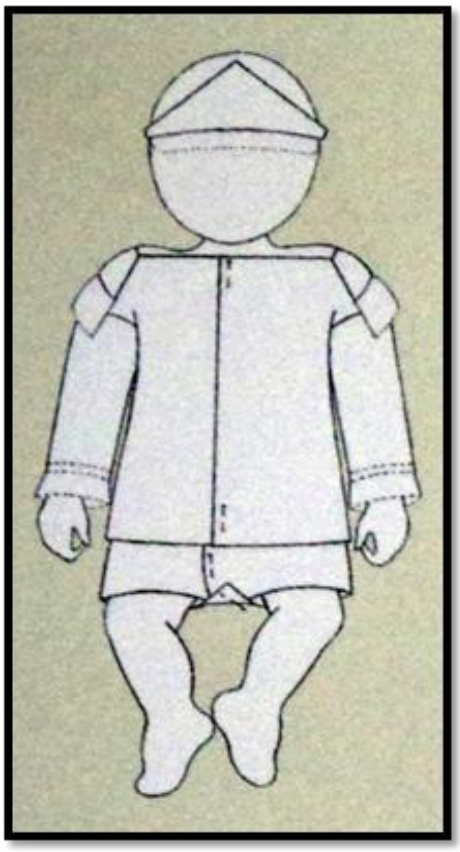
Hedge, (2011)[52] " Green clothing for infants" developed and evaluated infant wear garments and accessories which showed good acceptance for the design, color, comfort, style, finish, price and Eco-friendliness characters by the mothers and textile specialists. New brand "Nysergika sBannada Savayava Shishu Vasana," has also been developed to manufacture environment friendly clothing for infants.

Hegde and Bai, (2011)[51] "Ahimsa mulberry spun silk outer wear for infants" designed Ahimsa mulberry spun silk infant garments, without compromising on the quality of silk and productivity of operation. The garments designed had unique characteristics and were desirable, as they were pure, natural, eco-friendly, have breathability, drape, anti-bacterial and ultraviolet protection factor which make infants comfortable and regulate the humidity level of their skin.

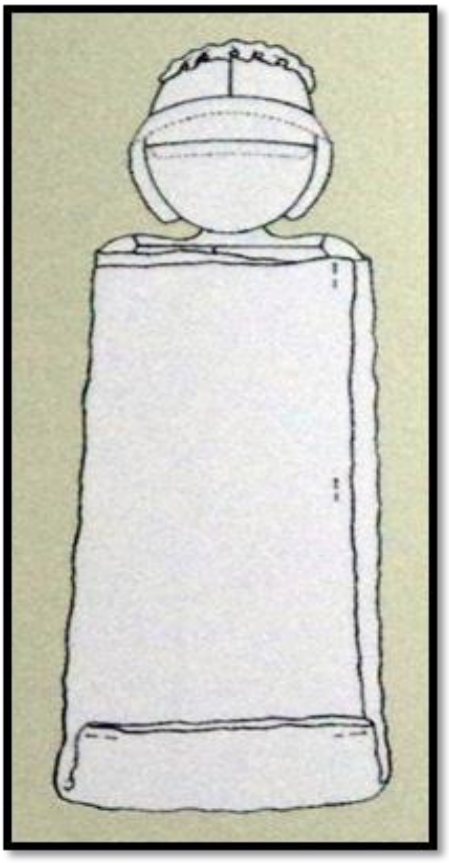
Along with reviewing the various studies done, **the review regarding pictorial history of clothing for babies has been traced along with available list of clothing for babies. The pictorial history dates back to early 18th century to 20th century.**

Pictorial History of Clothing for Babies

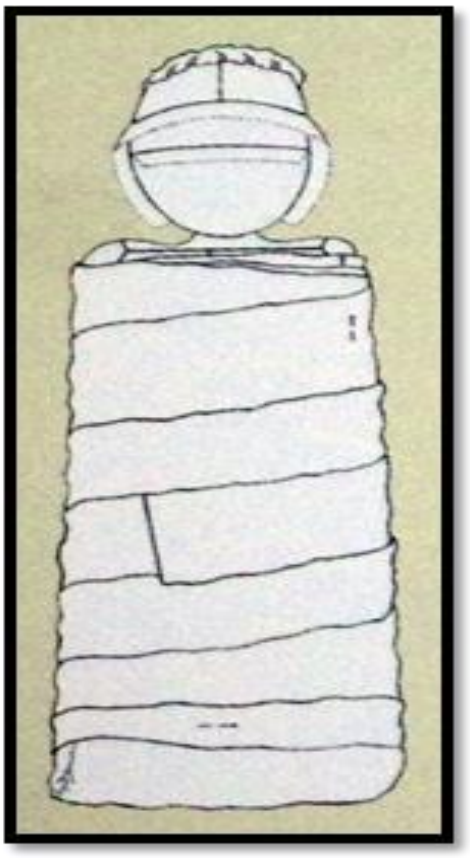
Early 18th-century baby[31]



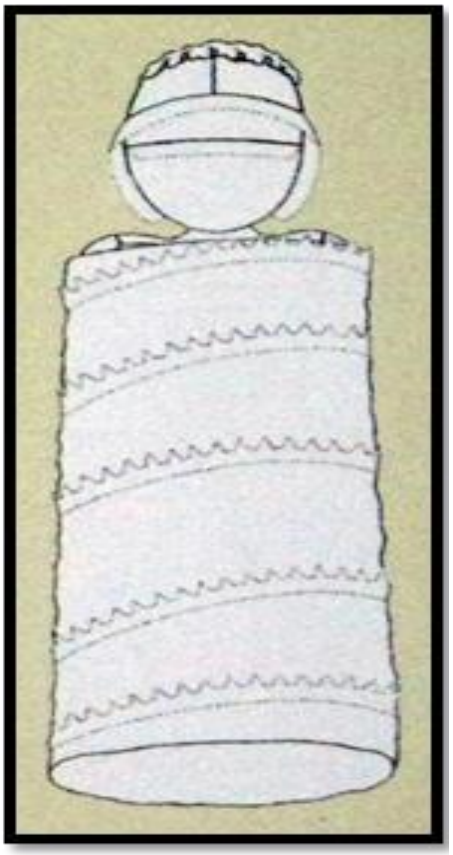
Forehead cloth with shirt & nappy



Cap and blanket or ‘bed’

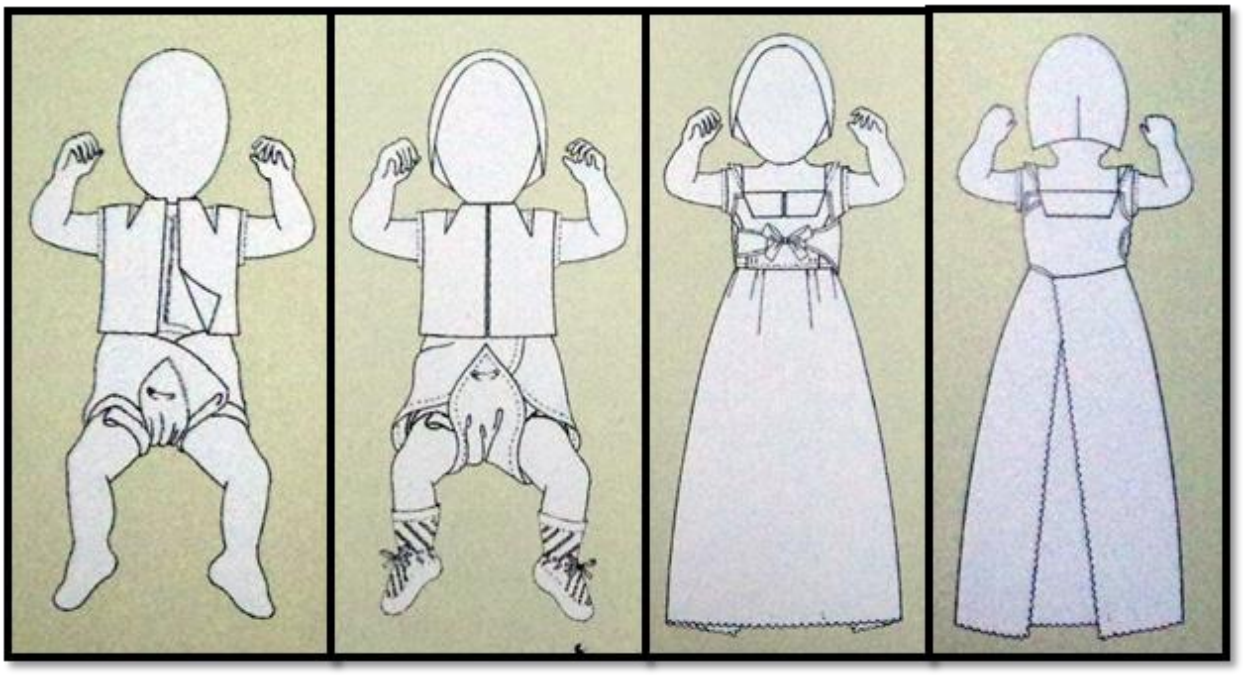


Swadding bands

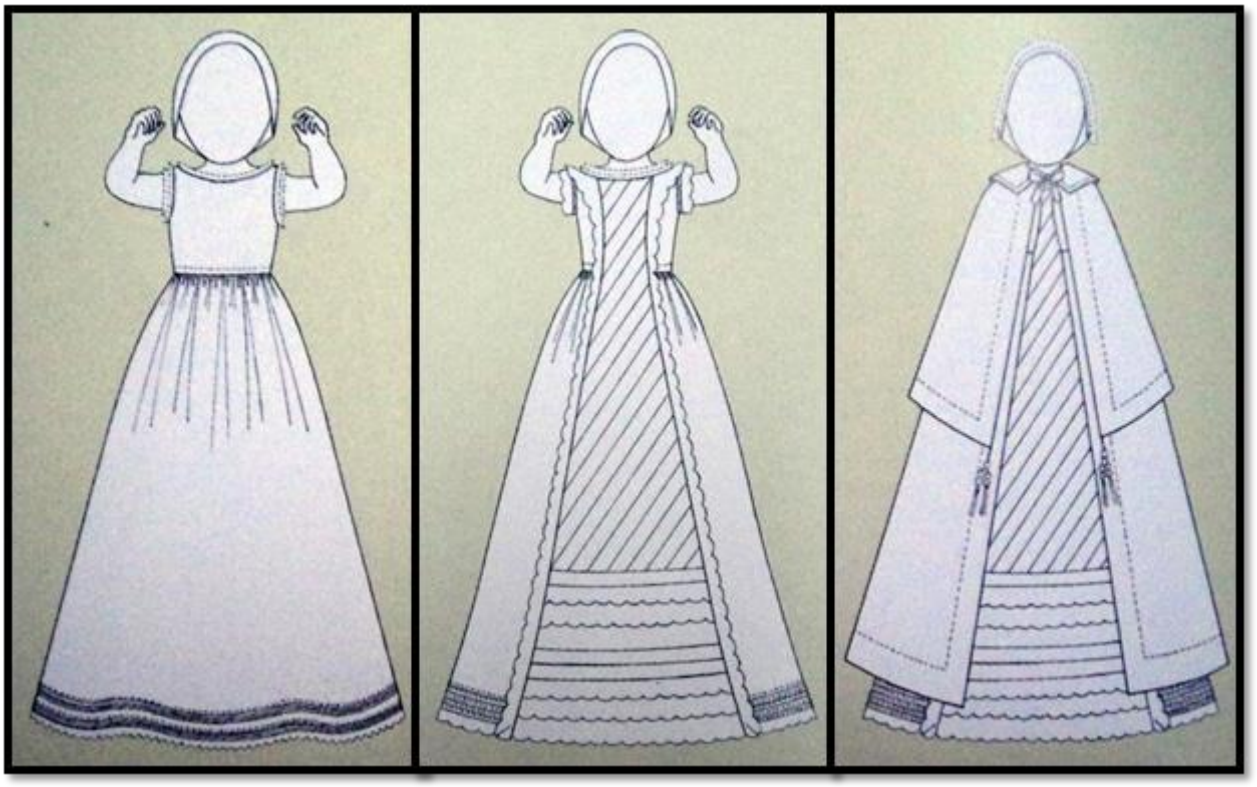


Decorative outer Swadding bands

Early 19th – century baby

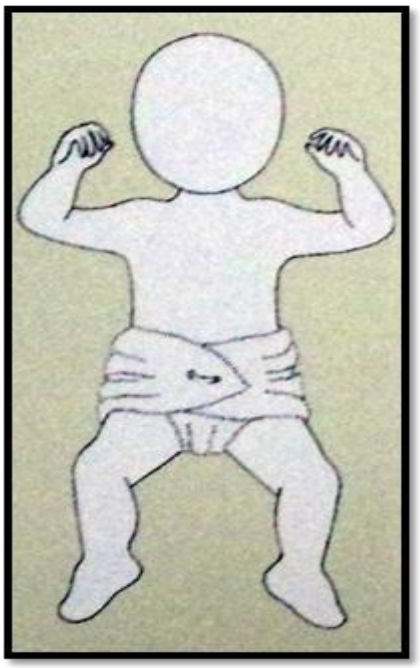


Binder, nappy and shirt | **Cap, pilch and Bootees** | **Front Barra coat** | **Back**

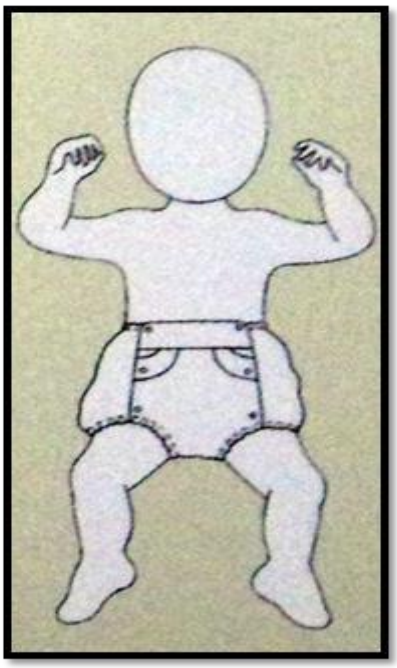


Petticoat with bodice | **Long gown** | **Cape and bonnet**

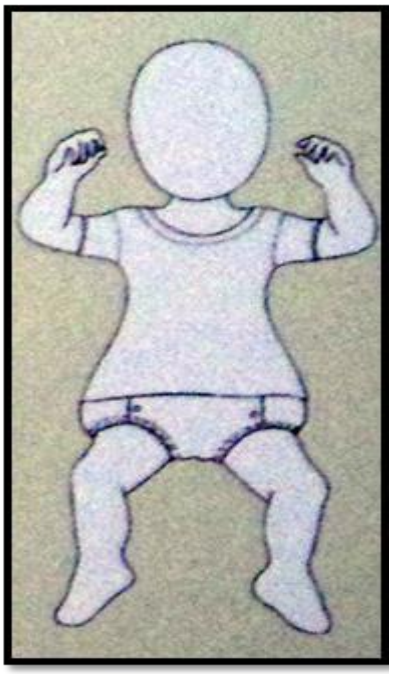
Early 20th-century baby



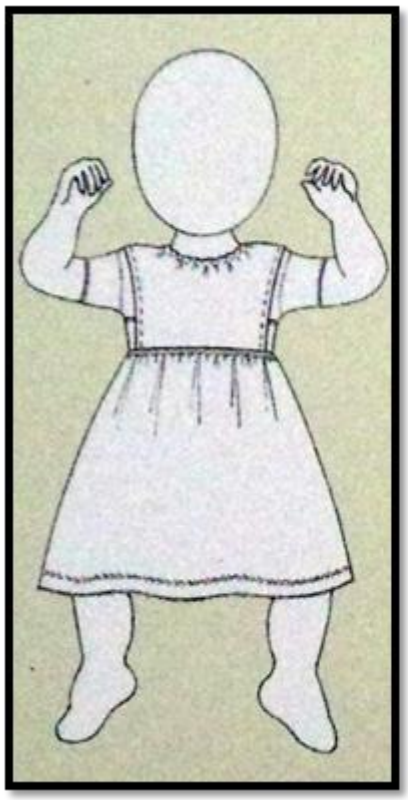
Nappy



Waterproof pants



Vest



Petticoat

Dress

Knitted bonnet, coat and bootees

List of Clothing for Babies & Toddlers

Underwear and nightclothes: bapkin, disposable (nappy), gauze square, knapkenette, muslin square, nappy, nappy liner, reusabletailclout, pilch, pilcher-trainer, training pants, bed binder, bellyband, body belt, liberty bodice, roller, stayband, staybodice, swathe, sweather, chemise, first shirt, vest, barracoat (barricoat, barrow, barrow coat, pinning, blanket, robe blanket, etc.), flannel, petticoat, nightgown, baby bag, ear cap, scratch mitten.

Outer clothing: angel top, cardigan, matinee coat or jacket, shrug, bayou, babystretch, buster suit, romper suit, rompers, stretch suit, dress, frock, gown, mantle (pre-19th century), robe, slip, wrapping gown, tights ,swaddling / swathing bands or clothes, long stay.

Outdoor clothes: baby bunting, bearing cloth, blanket, bunting, carrying cape, cloak, and hug-me-tightmantle (19th century), palm, pelerine, pram set, shawl, whittle, zephyr, leggings, legginettes.

Occasions: bearing cloth, chrisom, christening gown/ clothes/ robes, circumcision gown/ clothes/ robes, palm, receiver, short coating, shortening, tucking up.

Accessories: backstring, leading strings, reins, bib, dribble catcher, feeder, muckinder, biggin, bonnet, cap, caul, crosscloth, forehead cloth, pudding, black pudding, infantee, mitten, sleeves, boot, bootee, shoe.

Justification of the Study

From time immemorial mothers have been making beautiful pieces of clothing for their children. Immediately after the mother conceives a mother starts planning for her child's clothing, keeping in view that her child shall be comfortable, the clothing shall not be harsh for the child, the piece of clothing shall be easy to be worn and removed, and above all that her child should look the most beautiful. But times are changing now, mothers still bear children, they still want to plan the child's clothing, they still want that the child should look the most beautiful but, they have no time…. Today's mother is shouldering an equal responsibility with her husband to run the family,

thus she tends to miss on this most beautiful experience. The need of the hour is to develop a designer range of the clothing for the infants keeping in view the feelings of a mother for her child. Clothing protects the skin and there is a need to design special clothing for infants. A critical analysis

of review of the literature reveals that a number of studies have been conducted on promotion and marketing strategies and a few on design developments in Khadi but hardly any effort has been made to design a Khadi kids range. However no effort has been made to develop infant wear using this natural, beautiful and comfortable fabric. The type of fabric selected for infant- wear bears a direct relation to the health of an infant. Majority of the clothing available for infants is either in terry-cot or other blends. Over and under clothing affects the growth of the child. The child remains irritated, which the anxious mother doesn't realize. The consumers today are looking for safe and hygienic clothing for infants. Khadi cotton, being hand spun and hand woven is friendlier to the environment, health and future of this planet. A wide variety of Khadi fabrics ranging from coarser to the finer counts are available. Moreover Khadi emphasizes the idea of decentralization in production and self-sufficiency at the local level. In a country like India, where thousands of children are born every day, if Khadi is used by parents for their clothing, the Khadi industry will get a great boost. Thus, it will also help in solving the problem of unemployment in villages where hundreds of men are either totally or partly unemployed. This is also the cheapest and simplest method of providing employment to the local people with the least amount of investment, for example, a textile mill which needs an investment of Rs. 20,000,000/- provides employment to only 1000 workers, where as an equal investment in Khadi has the potential to give employment to ten times the number. It not only helps in bringing the self-sufficiency in one of the basic needs of society, i.e. clothing, but being a natural fiber and being hand woven and hand spun it is very friendly to the skin, health of the child and also to the environment. Thus it will not only give comfort and health to the child, satisfaction to the mother but also will help in economic growth of the country. This is the basic idea of introducing Khadi in preference to the mill made cloth for infant wear.

Objectives of the Study

1. To Study the extent of acceptability of Khadi to be used as a base material for development of clothing range for upper middle class infants.
2. To study the existing Brands in Infant wear in Chandigarh.
3. To develop different Surface Enrichment Techniques on fine count Khadi.
4. To design and develop a range of clothing for infants(0-6 months).
5. To test the acceptability of developed range in Khadi over most extensively used fabric for Infant wear.
6. To develop a new kids brand 'Prerna' and logo.

Hypothesis

Based on the above objectives the following Hypothesis have been framed:

H_1: Khadi clothing is more suitable for the infants in comparison to most extensively used blends for Infant wear(based on the survey).

H_2: The developed designs are appropriate for Infants and acceptable to mothers.

Description of research work

Every form of research requires precise planning and collecting all available information regarding the subject. The present study will be undertaken with the sole objective of acceptance of Khadi as infant wear in Indian market.

Keeping this in mind a research design is proposed and a systematic procedure has been evolved to carry out the present study.

Conceptual Frame work of Research Study

The study begins with **Pretesting.**

Pretesting is a phase, in the development of tests, where the tests are tried out using a representative sample of target Population.

As per Wikipedia Encyclopedia, Pretesting is to test (something) before presenting it to its intended public or client.

Pretesting was done in **two steps:**

Step1): To Study the extent of acceptability of Khadi to be used as a base material for development of clothing range for infants: Chandigarh, a Union Territory has four Khadi stores selling Khadi Apparel. Since, the complete Research is based on Khadi, the researcher visited all these stores for two days each to analyse the total number of visitors visiting the store and also to see the economic strata the customers belong to. Depending upon the maximum footfall of the customers and also due to the mix of all economic strata's visiting the store, the Sector-17, Chandigarh Showroom of Khadi, was finalized for carrying out the pre-testing. A Questionnaire was finalized and the researcher was present at the Store for seven days and gathered the information. It was found, that the people are generally using homemade clothing for infants, and in some cases readymade clothing, and that clothing is made of Terry-cot or other blends and not in natural fiber. The people were however very receptive towards usage of Khadi as a base material for Infant Wear and they were of the opinion that it is a very unique concept and will gain popularity.

Step2): To finalize the standard measurements to be used for development of finalized garment Designs: The standard set of measurements as provided in Metric Pattern cutting for Children's Wear and Baby Wear were used .The same are being used at Northern India Institute of Fashion Technology (NIIFT), Mohali for more than ten years to teach Kids Wear, and the garments developed are worn by the same age group of Indian children and they fit them very well. However, the Bodice and the sleeve blocks for infants were developed and were tried on 10% of the total sample, and the results were positive.[47]

After Pretesting, the data will be collected from primary and secondary sources. The infant being too small, the data will be collected from mothers and mothers to be.

For expert advice on design, comfort, color, style, finish, price and eco-friendliness a panel of experts will be constituted. The same would include designers, pediatricians, clothing and textile experts, dermatologists, mothers and mothers to be.

The complete research will be carried out in three Phases.

PHASE 1. Surveying the brands dealing in Infant wear in Chandigarh

PHASE 2.Development of Designer Clothing Range for Infants in Khadi

PHASE 3.Testing Acceptability of Khadi as Infant Wear

PHASE1.

A survey will be carried out to study the Indian and International Brands dealing in Infant wear in Chandigarh .The city will be divided into four zones and the markets catering to the upper middle class will be selected .The Questionnaire will focus on the Origin, Product range, Size range, Price range, Variety of Fabrics being used, type of Finishes etc. The same will be filled by the Brand Managers. The purpose to conduct the survey would be to finalize the range of Infant wear which is required for a newborn child but is not available in the market. The data for the same will be collected from the mothers and mothers to be through interview schedule to make the study need based.

PHASE 2.

Development of designer clothing range for infants in Khadi will be carried out using the following steps:

Step 1: A complete range of clothing will be designed for infants keeping in view the following:

a) Clothing that survives vigorous activity and endless washings.

b) Clothing that has a room for sudden growth spurt.

c) Clothing that is easy to put on.

d) Clothing that has anti-microbial finishes.

The designed range will be developed based on the brand study and after getting the list of clothing items approved by the panel.

The panel would include the following experts:

a) Mothers	d) Dermatologists
b) Mothers to be	e) Designers
c) Pediatricians	f) Clothing and Textile Experts

Step 2: It will include presentation of concept in front of the panel. The concept will be related

to Nature. The concept at this level will be instrumental in helping to finalize the silhouettes and color combinations.

Step 3: The concept will be developed using various surface enrichment techniques like:

a) Appliqué work: This effect is produced by applying pieces of fabric of different shapes & sizes to the surface of another fabric. The fabric pieces may vary in color, pattern and texture. The technique varies from machine to hand work.

b) Combination of hand painting and machine embroideries.

c) Machine sewing techniques: Various sewing techniques like tucks, pleats, ruffles, shirring etc., will be used to develop the surfaces.

d) Patchwork: The term "PATCHWORK" is used to describe the joining of shaped pieces of patterns or colored fabrics to form a cloth mosaic. It is a technique that offers limitless scope for experimenting with pattern, color & texture.

e) Quilting: The techniques of quilting vary depending on the effects required. The basic method is of joining three layers of fabric together with stitching using linear or circular pattern. Raised and corded quilting will be used. A minimum of 20 samples of each technique will be developed. Thus five different range of clothing will be designed.

Step 4: It will include the execution of designs on fine count Khadi fabric using standard infant measurements for pattern developments (As per Pretesting).

Step 5: Presentation of five different design collections in front of the panel of experts for approval of one to be finally developed in bulk. The selected clothing range will be used for data collection.

PHASE 3: Testing acceptability of Khadi as infant wear would require various steps like finalization of Locale of the study, selection of hospitals, selection of infants, and formulation of tools for data collection and then analysis of data.

Step 1.Locale for the study

The study will be carried out in Chandigarh, a cosmopolitan city and the capital of Haryana and Punjab state, besides it being a Union Territory. The literacy rate here is higher (81.7%) as compared to all India figures (65.38%). People belonging to different socio-economic stratas are

residing in this city.

Chandigarh represents the population belonging to upper, upper middle, middle and lower socio-economic strata. Chandigarh is famous for its medical facilities. The world renowned Postgraduate Institute of Medical Sciences and Research (PGIMER) is located in Chandigarh. The Government Multispecialty Hospital Sector–16 and the Government Medical College and Hospital Sector-32 are amongst the most sought after hospitals in Chandigarh along with various Allopathic, Ayurvedic, Homeopathic, Yunani dispensaries, Polyclinic, Community Health Centers, Police Hospitals etc. located in various Sectors. People being educated and also due to quality of health facilities available, people of all economic stratas visit the hospitals for child-deliveries.

Also due to the extreme climatic conditions in Chandigarh, the people of Chandigarh have a great acceptability for cotton fabric, and this fabric is not only worn by parents but they also prefer the same for their children. And Khadi being handspun and hand-woven have the properties of remaining cool in summers and warm in winters. Thus, Chandigarh is found to be the most appropriate area to conduct the study.

Step 2: Selection of Hospitals

On the basis of the data available with Chandigarh administration, the Government Multispecialty Hospital Sector–16 and the Government Medical College and Hospital Sector–32 are the most visited Government hospitals in Chandigarh for child- deliveries by people of all economic strata's, thus the above two are selected for conducting the research.

Step 3: Selection of Infants

Selection of expectant mothers will be done as per the records available with hospitals. The expectant mothers who are likely to deliver within two months, starting from a specific date will be taken. On the basis of the data available with the hospital the number will range from 150 to 200 deliveries in each hospital. Following this different type of sampling methods will be used such as random sampling and stratified random sampling to finally select the sample of the infants delivered by the mothers. The same will be done either by lottery or by a random numbering method. The financial condition of the families will also be kept in mind. Thus, a sample of 30

each will be taken from both the hospitals.

Step 4: Formulation of tools for Data Collection

To ultimately find out the acceptability of Khadi clothing for infants, out of a total sample of 60 from both hospitals half will be given Khadi clothing and half will be given clothing made of the blend which is most extensively used for making Infant wear (as per the results of survey conducted in Phase 1). Both will have similar design development on the surface and then the data will be collected by questionnaires and interview schedules at four stages.

1. At the time of birth and handing over of the clothing.
2. After 40 days.
3. After 3 months.
4. At 6 months of age.

Step 5: Analysis of data

The data collected will be first edited then manually coded and processed, quantitatively measured and tabulated. After tabulation appropriate small sample statistical tests like t or f test etc. will be applied to draw inferences which will be significant for our study.

Summary of the work

Khadi means "any cloth which has been hand spun and hand woven in India from cotton, silk or woolen yarns or from a mixture of any two or more such yarns."Khadi was conceived in nineteen twenties as a symbol of Swadeshi movement and self-reliance of the villages. Basically the objective of Khadi is to harness the local materials and skill for production of fancy and other articles and to generate employment in rural areas.

Khadi market has undergone a dynamic change and today exquisite varieties of Khadi with attractive and vibrant colors' are available, catering to the consumer tastes and preferences attractive colors, prints in the form of dress materials, not only attract the customers but also compete with other textiles.

Infancy being the beginning or the early period of existence as an individual is a very important period of the life span. Today, infant clothing are required to meet all requirements related to

comfort, health care, handle, easy to wear, easy care properties as well as performance.

The market for the infant wear is still very naive in India; there is lot of scope for development. The customer will not mind to pay extra for safety and health. The largest manufacturers of garments and also the designers are working in this direction.

Thus the study has been planned with above mentioned objectives and the following limitations.

Limitations of the study

1. The study is limited to Government Hospitals of Chandigarh for sample collection.
2. The sample size is limited to expectant mothers, who deliver within 2 months of the specified date.
3. Only fine count Khadi will be used.
4. The study is limited to the development of Summer Clothing only.
5. Only the following Surface Enrichment Techniques will be used for Design development.

a) Applique work

b) Combination of embroidery and hand painting.

c) Machine Sewing techniques

d) Patch work

e) Quilting

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